

## Participant Questionnaire

Participant number: 14

Date: \_\_\_\_\_

Location: Brescia, IT

HRC Study / Algorithms tested: HAMP, STAP-RPF

Study Conducted by: Jared Flowers

Participant link lengths/dimensions: (meters, "spine" is pelvis to shoulder midpoint, "shoulders" is shoulder to shoulder)

Spine	
Neck	
Shoulders	<u>.38</u>

Left Upper Arm	<u>.28</u>
Left Forearm	<u>.26</u>

Right Upper Arm	<u>.26</u>
Right Forearm	<u>.25</u>

Participant joint diameter: (meters)

Left Elbow	<u>.1</u>
Left Wrist	<u>.065</u>

Right Elbow	<u>.095</u>
Right Wrist	<u>.065</u>

### Questions:

- A. How safe did you feel? (0 is not safe at all, 5 is neutral, 10 is very safe)
- B. Do you think the robot hindered your motions during the task? (0 is robot completely prevented your motions, 5 is neutral, 10 is robot did not impede you motion)
- C. Did the robot perform logical motions? (0 is robot motions made no sense to you, 5 is neutral, 10 is robot motions made sense to you)
- D. What is your overall satisfaction with the HRC task? (0 is you would not work in this HRC cell again, 5 is neutral, 10 is you enjoyed working in this cell with the robot)

Participant number: 14 Date: \_\_\_\_\_

**For Task 1 (engine parts):** (circle your answer to each question)

Task 1, Method 1:										
Question A: (0 is not safe at all, 5 is neutral, 10 is very safe)										
0	1	2	3	4	5	6	7	8	9	10
Question B: (0 is robot completely prevented your motions, 5 is neutral, 10 is robot did not impede you motion)										
0	1	2	3	4	5	6	7	8	9	10
Question C: (0 is robot motions made no sense to you, 5 is neutral, 10 is robot motions made sense to you)										
0	1	2	3	4	5	6	7	8	9	10
Question D: (0 is you would not work in this HRC cell again, 5 is neutral, 10 is you enjoyed working in this cell with the robot)										
0	1	2	3	4	5	6	7	8	9	10

Task 1, Method 2:										
Question A: (0 is not safe at all, 5 is neutral, 10 is very safe)										
0	1	2	3	4	5	6	7	8	9	10
Question B: (0 is robot completely prevented your motions, 5 is neutral, 10 is robot did not impede you motion)										
0	1	2	3	4	5	6	7	8	9	10
Question C: (0 is robot motions made no sense to you, 5 is neutral, 10 is robot motions made sense to you)										
0	1	2	3	4	5	6	7	8	9	10
Question D: (0 is you would not work in this HRC cell again, 5 is neutral, 10 is you enjoyed working in this cell with the robot)										
0	1	2	3	4	5	6	7	8	9	10

Task 1, Method 3:										
Question A: (0 is not safe at all, 5 is neutral, 10 is very safe)										
0	1	2	3	4	5	6	7	8	9	10
Question B: (0 is robot completely prevented your motions, 5 is neutral, 10 is robot did not impede you motion)										
0	1	2	3	4	5	6	7	8	9	10
Question C: (0 is robot motions made no sense to you, 5 is neutral, 10 is robot motions made sense to you)										
0	1	2	3	4	5	6	7	8	9	10
Question D: (0 is you would not work in this HRC cell again, 5 is neutral, 10 is you enjoyed working in this cell with the robot)										
0	1	2	3	4	5	6	7	8	9	10

Comments: Robot Experience: 3

**For Task 2 (Sharework parts: metal tabs, cylinders, pallets):** (circle your answer to each question)

Task 2, Method 1:										
Question A: (0 is not safe at all, 5 is neutral, 10 is very safe)										
0	1	2	3	4	5	6	7	8	9	10
Question B: (0 is robot completely prevented your motions, 5 is neutral, 10 is robot did not impede you motion)										
0	1	2	3	4	5	6	7	8	9	10
Question C: (0 is robot motions made no sense to you, 5 is neutral, 10 is robot motions made sense to you)										
0	1	2	3	4	5	6	7	8	9	10
Question D: (0 is you would not work in this HRC cell again, 5 is neutral, 10 is you enjoyed working in this cell with the robot)										
0	1	2	3	4	5	6	7	8	9	10

Task 2, Method 2:										
Question A: (0 is not safe at all, 5 is neutral, 10 is very safe)										
0	1	2	3	4	5	6	7	8	9	10
Question B: (0 is robot completely prevented your motions, 5 is neutral, 10 is robot did not impede you motion)										
0	1	2	3	4	5	6	7	8	9	10
Question C: (0 is robot motions made no sense to you, 5 is neutral, 10 is robot motions made sense to you)										
0	1	2	3	4	5	6	7	8	9	10
Question D: (0 is you would not work in this HRC cell again, 5 is neutral, 10 is you enjoyed working in this cell with the robot)										
0	1	2	3	4	5	6	7	8	9	10

Task 2, Method 3:										
Question A: (0 is not safe at all, 5 is neutral, 10 is very safe)										
0	1	2	3	4	5	6	7	8	9	10
Question B: (0 is robot completely prevented your motions, 5 is neutral, 10 is robot did not impede you motion)										
0	1	2	3	4	5	6	7	8	9	10
Question C: (0 is robot motions made no sense to you, 5 is neutral, 10 is robot motions made sense to you)										
0	1	2	3	4	5	6	7	8	9	10
Question D: (0 is you would not work in this HRC cell again, 5 is neutral, 10 is you enjoyed working in this cell with the robot)										
0	1	2	3	4	5	6	7	8	9	10

**Comments:**

In my opinion method 2 is the most efficient, the robot follow "conservative" trajectory but this allows to perform the task quicker.